

WHAT IS CLAIMED IS:

1. An image processing apparatus comprising:
input means for inputting image information;
determination means for determining whether an
5 input image contains a mark indicative of a specific
image;
setting means for setting allowable time necessary
for the determination to be made by said determination
means; and
10 control means for terminating determination
processing by said determination means in a case where
it cannot be determined whether the input image contains
the mark indicative of a specific image within the
allowable time set by said setting means.
15
2. The apparatus according to claim 1, wherein said
determination means executes determination processing
whenever precision of sampling of the input image is
raised in stages and, if the mark indicative of a
20 specific image is contained in the input image, suspends
subsequent determination processing at the prevailing
stage of sampling precision.
3. The apparatus according to claim 2, wherein
25 sampling precision of said determination means narrows,
in stages, intervals at which the input image is

sampled.

4. The apparatus according to claim 1, wherein said
determination means executes determination processing
5 whenever determination precision is raised in stages by
increasing a number of quantization bits of the image
data in stages and, if the mark indicative of a specific
image is contained in the input image, suspends
subsequent determination processing at the prevailing
10 stage of determination precision.

5. The apparatus according to claim 2, wherein a
threshold value for determining in said determination
means whether the mark indicative of a specific image is
15 contained in the input image is provided for each stage
of precision.

6. The apparatus according to claim 1, further
comprising output means for outputting the image, which
20 has been input by said input means, to printing means;
wherein said output means outputs the input image
in a case where the mark indicative of a specific image
is not detected in the input image within the allowable
time.

25

7. The apparatus according to claim 5, wherein a period

of time which satisfies the following relation is set as the allowable time:

$$T_{av} \leq (M-H)/m$$

where H represents time needed to construct an output
5 image by said output means, M represents a critical time
at which the printing operation by said printing means
attains a waiting state in which said printing means
stands by for reception of data, m represents number of
times determination processing is executed by said
10 determination means, and T_{av} represents the allowable
time per determination processing.

8. The apparatus according to claim 6, wherein output
by said output means is suspended in a case where said
15 determination means determines that the mark indicative
of a specific image is contained in the input image.

9. The apparatus according to claim 1, wherein the
allowable time is dynamically variable.

20

10. The apparatus according to claim 1, wherein the
mark indicative of a specific image includes a
watermark.

25 11. A host computer incorporating the image processing
apparatus set forth in claim 1.

12. A printing apparatus incorporating the image processing apparatus set forth in claim 1.

5 13. An image processing method comprising:

an input step of inputting image information;

a determination step of determining whether an image obtained by subsampling the input image contains a mark indicative of a specific image;

10 a setting step of setting allowable time necessary for the determination to be made at said determination step; and

a control step of terminating determination processing at said determination step in a case where it
15 cannot be determined whether the input image contains the mark indicative of a specific image within the allowable time set at said setting means.

14. A storage medium storing program code capable of
20 being read in and executed by a computer, comprising:

program code of an input step of inputting image information;

program code of a determination step of determining whether an image obtained by subsampling the input image
25 contains a mark indicative of a specific image;

program code of a setting step of setting allowable

